



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,043	12/04/2001	Thomas I. Yeh	88413.000002	9524

23387 7590 06/13/2005

Stephen B. Salai, Esq.
Harter, Secrest & Emery LLP
1600 Bausch & Lomb Place
Rochester, NY 14604-2711

EXAMINER

PEREZ DAPLE, AARON C

ART UNIT	PAPER NUMBER
----------	--------------

2154

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,043

Applicant(s)

YEH ET AL.

Examiner

Aaron C. Perez-Daple

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Amendment filed 2/3/05, which has been fully considered.
2. Amended claims 1-14 are presented for examination.
3. This Action is Final.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the term “electrical interface configuration information” does not have proper antecedent basis. If proper support can be found in the original disclosure, then the specification should be amended to include this subject matter. Otherwise, the subject matter should be cancelled from the claims. No new matter should be entered.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In addition, the specification, while being enabling for “data translation

configuration information,” does not reasonably provide enablement for “electrical interface configuration information.” The specification does not enable a person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Specifically, the disclosure as originally filed does not distinguish between “electrical interface configuration information” and “data translation configuration information” as recited in claims 1 and 8, but rather presents a single “personality file” for configuring several aspects of the interface as detailed on page 10 of the specification. In fact, “electrical interface configuration information” does not appear to be disclosed at all, and certainly not in a manner that would distinguish it from “data translation configuration information.” Even assuming without admitting that the attributes listed on page 10 may somehow be divided into the two presently claimed groups, it is not clear how they would be divided. All of the listed items appear to relate only to the data translation configuration.

6. As dependent claims, claims 2-7 and 9-14 suffer from the same deficiencies as claims 1 and 8.
7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. **Claims 1-14** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the scope of the term “electrical interface configuration information” as recited in claims 1 and 8 is not clear from the claims nor the disclosure. The term has not been defined in the specification and does not have a standard

meaning in the art. Therefore, one of ordinary skill in the art would not be reasonably apprised of the scope of the claims.

In the Remarks filed 2/3/05, Applicant makes a case for “electrical interface configuration information” as being distinct from “data translation configuration information.” However, the specification actually discloses a single “personality file” for configuring several attributes of the interface (see pg. 10). It is not clear how the listed attributes are divided between the two types of configuration information (or even if, in fact, this is what is being claimed). In particular, all of the listed attributes appear to refer only to the data translation configuration. The only particular example of what the Applicant might mean by “electrical configuration information” is presented in the last paragraph of pg. 7 of the Remarks, where Applicant cites “electrical signaling levels” as an example of “electrical issues.” However, the Examiner can find no reference to electrical signaling levels in the specification. Moreover, this still does not help to define the overall scope of the term “electrical interface configuration information.”

For the purpose of applying prior art, the Examiner interprets that “electrical interface configuration information” may comprise configuration information related to data translation and protocol interpretation.

9. Claim 14 is further rejected as unclear because line 2 recites “data translation” where it appears that it should more properly recite “data translation configuration information.” It is not clear how “data translation” by itself could be retained.
10. As dependent claims, claims 2-7 and 9-14 suffer from the same deficiencies as claims 1 and 8.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. **Claims 1, 2, 4, 6-9, 11, 13 and 14** are rejected under 35 U.S.C. 102(b) as being anticipated by Rostoker et al. (US 6,131,124) (hereinafter Rostoker).
13. As for claims 1 and 8, Rostoker discloses a method and system for connecting one of a plurality of industrial machines having different data format and storage configurations to a communications medium for remote monitoring and control, the method comprising:
- (a) storing data in predetermined locations and in a predetermined format, and storing both electrical interface configuration information and data translation configuration information relating to the at least one of the industrial machines in a memory (col. 3, lines 34-54; col. 7, lines 39-53);
- (b) configuring an electrical interface for direct connection to at least one of the industrial machines in response to the stored electrical interface configuration information and directly connecting the interface to the machine (col. 2, lines 18-36; col. 3, lines 34-54; Fig. 1C, Fig. 3B);
- (c) receiving machine data from the industrial machine and sending data to the industrial machine through the configurable directly connectable electrical interface responsive to the configuration information (col. 3, line 55 – col. 4, line 3);

(d) configuring a data translator in response to the stored data translation configuration information for receiving data from the interface and transforming the data to the predetermined format in the data translator responsive to the data translation configuration information (col. 7, lines 1-24);

(e) reading data from and writing data to the predetermined locations in the memory with a processor responsive to the data translation configuration information (col. 6, lines 53-67; col. 7, lines 1-24); and

(f) connecting a communications port to the communications medium (col. 1, lines 49-62; Figs. 1C and 3B).

14. As for claims 2 and 9, Rostoker discloses the method and system of claims 1 and 8, further comprising including data transform information in the information relating to the industrial machine, and the data translator is responsive to the data transform information (col. 7, lines 39-53).

15. As for claims 4 and 11, Rostoker discloses the system and method of claims 1 and 8, further comprising storing the configuration information in a non-volatile memory (ROM, col. 7, lines 39-53).

16. As for claims 6 and 13, Rostoker discloses the system and method of claims 1 and 8, further comprising processing both electrical interface configuration information and data translation configuration information and loading the configuration information into the memory in a configuration processor separate from the apparatus and removably connectable to the apparatus (col. 6, lines 53-67).

17. As for claims 7 and 14, Rostoker discloses the system and method of claims 1 and 8, further comprising retaining both electrical interface configuration information and data translation for a plurality of industrial machines in the configuration information (col. 7, lines 39-53).
18. **Claims 1-4, 7-11, and 14** are rejected under 35 U.S.C. 102(b) as being anticipated by Heidhues et al. (US 6,032,203) (hereinafter Heidhues).
19. As for claims 1 and 8, Heidhues discloses a method and system for connecting one of a plurality of industrial machines having different data format and storage configurations to a communications medium for remote monitoring and control, the method comprising:
 - (a) storing data in predetermined locations and in a predetermined format, and storing both electrical interface configuration information and data translation configuration information relating to the at least one of the industrial machines in a memory (col. 5, lines 41-64);
 - (b) configuring an electrical interface for direct connection to at least one of the industrial machines in response to the stored electrical interface configuration information and directly connecting the interface to the machine (col. 4, lines 19-44; Fig. 1);
 - (c) receiving machine data from the industrial machine and sending data to the industrial machine through the configurable directly connectable electrical interface responsive to the configuration information (col. 4, lines 19-44; col. 5, lines 27-64);
 - (d) configuring a data translator in response to the stored data translation configuration information for receiving data from the interface and transforming the data to the

Art Unit: 2154

predetermined format in a data translator responsive to the configuration information (col. 4, lines 19-44; col. 5, lines 27-64; Fig. 4);

(e) reading data from and writing data to the predetermined locations in the memory with a processor responsive to the data translation configuration information (col. 4, lines 19-44; col. 5, lines 27-64; Figs. 4 and 5); and

(f) connecting a communications port to the communications medium (col. 3, line 41 - col. 4, line 18; Fig. 1).

20. As for claims 2 and 9, Heidhues discloses the method and system of claims 1 and 8, further comprising including data transform information in the information relating to the industrial machine, and the data translator is responsive to the data transform information (col. 5, lines 27-64).
21. As for claims 3 and 10, Heidhues discloses the system and method of claims 1 and 8, further comprising coupling a display to the processor for displaying the data to a user (col. 4, lines 19-44)
22. As for claims 4 and 11, Heidhues discloses the system and method of claims 1 and 8, further comprising storing the configuration information in a non-volatile memory (col. 10, lines 32-43).
23. As for claims 7 and 14, Heidhues discloses the system and method of claims 1 and 8, further comprising retaining both electrical interface configuration information and data translation for a plurality of industrial machines in the configuration information (col. 5, lines 27-64, Fig. 1).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. **Claims 3 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Rostoker in view of Fackler et al. (US 5,729,204) (hereinafter Fackler).

26. As for claims 3 and 10, because Rostoker teaches using an attached apparatus to update configuration information in the memory (col. 6, lines 53-67), it could be argued that such an apparatus would inherently include a display for displaying data to a user. However, Rostoker does not explicitly disclose coupling a display to the processor for displaying data to a user. Fackler teaches coupling a display to the processor of an interface device similar to claims 1 and 8 for the purpose of displaying data to a user and updating information stored in memory (Fig. 6; col. 15, lines 42-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rostaker by using a display coupled to the processor for displaying data to a user in order to update information stored in memory, as taught by Fackler above.

27. **Claims 5 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Rostoker in view of Khan et al. (US 6,088,624) (hereinafter Khan).

28. As for claims 5 and 12, Rostoker does not specifically disclose storing the configuration information in a removable memory. Khan teaches storing configuration information in

Art Unit: 2154

removable memory for the purpose of configuring the device for additional machines (discs 33, Fig. 1; col. 4, lines 3-10). It would have been obvious to one of ordinary skill in the art to modify Rostoker by storing the configuration information in removable memory for the purpose of configuring the device for additional machines, as taught by Khan above.

29. **Claims 5 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidhues in view of Khan.

30. As for claims 5 and 12, Heidhues does not specifically disclose storing the configuration information in a removable memory. Khan teaches storing configuration information in removable memory for the purpose of configuring the device for additional machines (discs 33, Fig. 1; col. 4, lines 3-10). It would have been obvious to one of ordinary skill in the art to modify Heidhues by storing the configuration information in removable memory for the purpose of configuring the device for additional machines, as taught by Khan above.

31. **Claims 6 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidhues in view of Dew (US 5,963,450).

32. As for claims 6 and 13, Heidhues does not specifically disclose the use of a configuration processor separate from the apparatus and removably connectable to the apparatus.

However, Dew discloses a programmable interface apparatus and method similar to claims 1 and 8, further comprising a configuration processor separate from the apparatus and removably connectable to the apparatus for processing configuration information and loading the configuration information into the memory (PC 74, Fig. 3; col. 5, lines 37-42, "A PC based data...communication networks."). It would have been obvious to one of ordinary skill in the art to modify Heidhues with the teachings of Dew by adding a configuration

processor separate from the apparatus and removably connectable to the apparatus in order provide a user interface for user control and configuration of the controller, as taught by Dew (col. 2, lines 51-62, "Data from each slave... each slave device.").

Response to Arguments

112 Claim Rejections

33. The previous 112, second paragraph, rejection of claim 9 is hereby withdrawn in view of Amendment.
34. New rejections of claims 1-14 have been applied under 35 U.S.C. 112, as detailed above.

102 Claim Rejections

35. Applicant's arguments filed 2/3/05 have been fully considered but they are not persuasive.

Applicant's arguments are primarily directed towards the failure of the references to properly anticipate the limitation "electrical configuration information" for configuring the electrical interface. However, as detailed in the 112 rejections above, the specification is not enabling for this limitation, and the term "electrical configuration information" is not defined in the specification and does not have a standard meaning in the art. Therefore, the Examiner reasonably interprets that "electrical configuration information" may comprise configuration information related to data translation and protocol interpretation. This interpretation is supported by Applicant's own specification (see pg. 10, for example). Under this

interpretation, Rostoker and Heidhues properly anticipate each limitation of the claims. See in particular col. 3, lines 23-54, of Rostoker and col. 4, lines 19-44, of Heidhues.

103 Claim Rejections

36. Applicant's arguments filed 2/3/05 have been fully considered but they are not persuasive.

Although each of the references is related to the configuration of an electrical interface, the references are not specifically relied upon to teach the limitations of "electrical interface configuration information" or configuring an electrical interface, which are taught by the primary references as detailed above. Specifically, Khan is relied upon only to teach that it is well-known to provide configuration information from a removable memory. Fackler is relied upon only to teach using a display coupled to the processor for displaying data to a user in order to update information stored in memory. Dew is cited only to teach a configuration processor separate from the apparatus and removably connectable to the apparatus. Proper motivation for each combination has been provided in the 103 rejections above. Therefore, claim 3, 5, 6, 10, 12 and 13 are properly rejected under 35 USC 103.

Conclusion

37. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**


Art Unit: 2154

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron C. Perez-Daple whose telephone number is (571) 272-3974. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 6/7/05

Aaron Perez-Daple



JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100